

## Benson Cu-Au Mine, Clark Mountains

17N 13E Sec. 23 SBM      35.53829999970      -115.55273999900

### Benson Group

Benson	17N 13E Sec. 23 SBM	35.53829999970	-115.55273999900
Mojave Tungsten Shaft	17N 13E Sec. 22 SBM	35.54999999960	-115.56751000000
Mojave Tungsten Well	17N 13E Sec. 15 SBM	35.55689999960	-115.56804000000
New Benson	17N 13E Sec. 27 SBM	35.53720000030	-115.56114000000
Pearl	17N 13E Sec. 27 SBM	35.53609999970	-115.55724000000
Tungsten Springs Pb	17N 13E Sec. 23 SBM	35.53969999960	-115.54664000000
Tungsten Springs W	17N 13E Sec. 23 SBM	35.54030000030	-115.55144000000
Ivanpah Springs	17N 13E Sec, 24 SBM	35°32'30.998" -	-115°31'39.917"

The Benson Mine Group encompasses the Benson, New Benson , Mojave Tungsten #2, Pearl, Ivanpah Springs, Tungsten Springs (Silver Mine), and the Tungsten Springs mines. (Bezore and Joseph, 1982, p. 45)

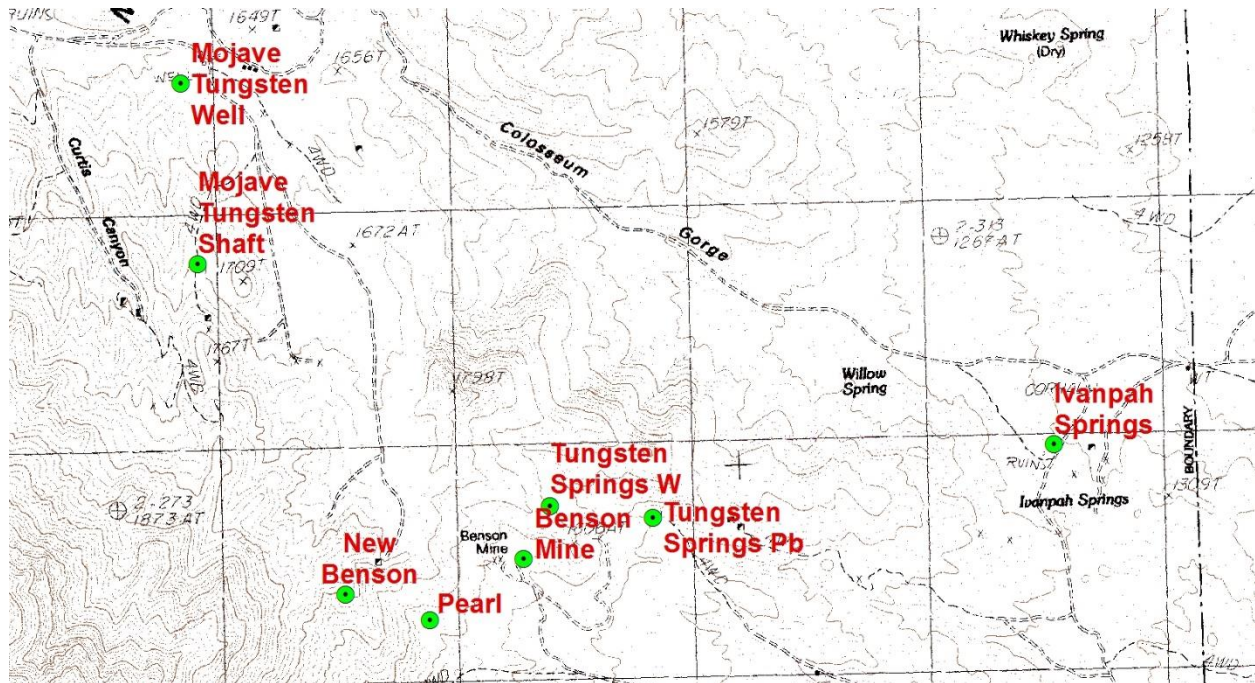


Figure 1. Topographic map of the Benson Group. USGS Ivanpah quadrangle, 1:24K.

These mines are situated along an east-west trending fault and an associated northwest-trending fault. Mineralization occurs in veins of quartz that carry pyrite, chalcopyrite, galena, stibnite, wolframite, limonite, and hematite and that occupy faults in Precambrian gneiss and schist. The mines have been worked for either gold, silver, copper or tungsten, but all are reported to carry, either lead or antimony. All of the mines appear to have at least minor silicification and some bleaching of the host rocks surrounding the veins. (Bezore and Joseph, 1982, p. 45)

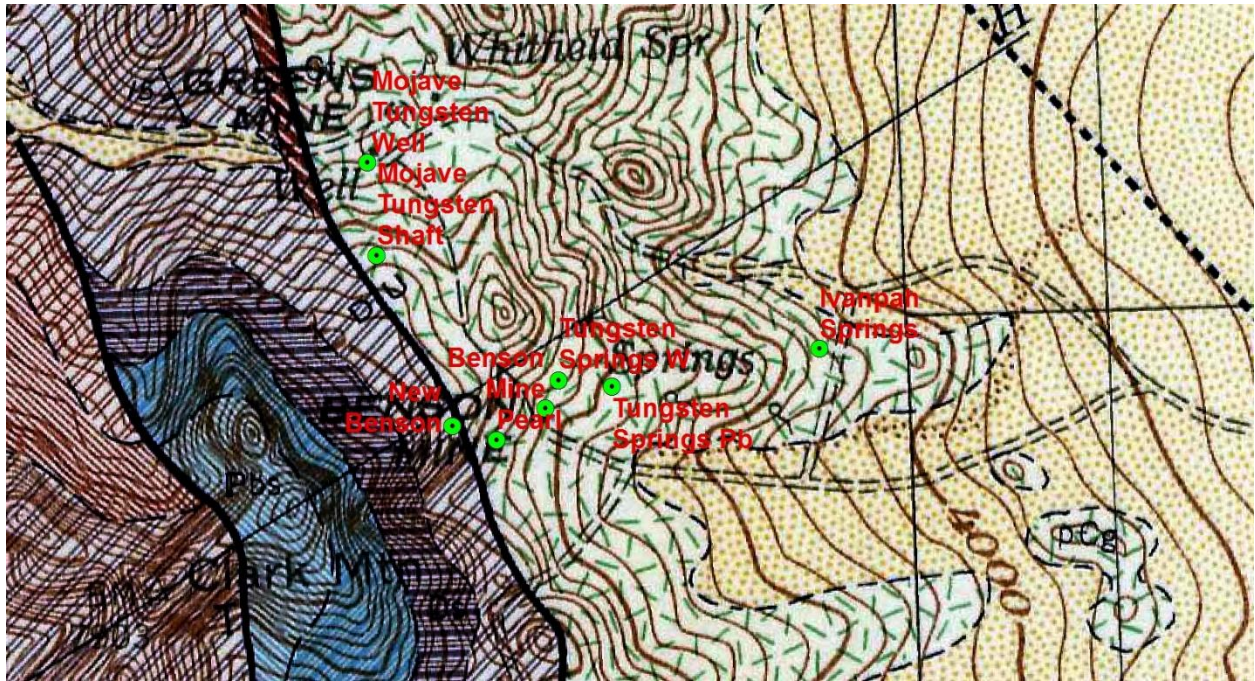


Figure 2. Geologic map of the Benson Group and surrounding area. From Hewett, 1956, Plate 1.

## Benson Mine

The Benson mine (Hewett no. 69, pl. 2) lies at the head of one of the ravines, low on the east face of Clark Mountain. (From Hewett, 1957, p.136). The Benson mine was accessible in 1961 via a dirt road which leads northwest from U.S. Highway 91 [now I-15] and Highway 466 approximately one-half mile north of Desert City Station. North of Antimony Gulch the road was very poor and could only be traveled over only in four-wheel drive vehicles (From Dobbs, 1961, p.84-85). As of 1995, travel on most roads in the EMNSA are restricted by law and the U.S. Park Service.

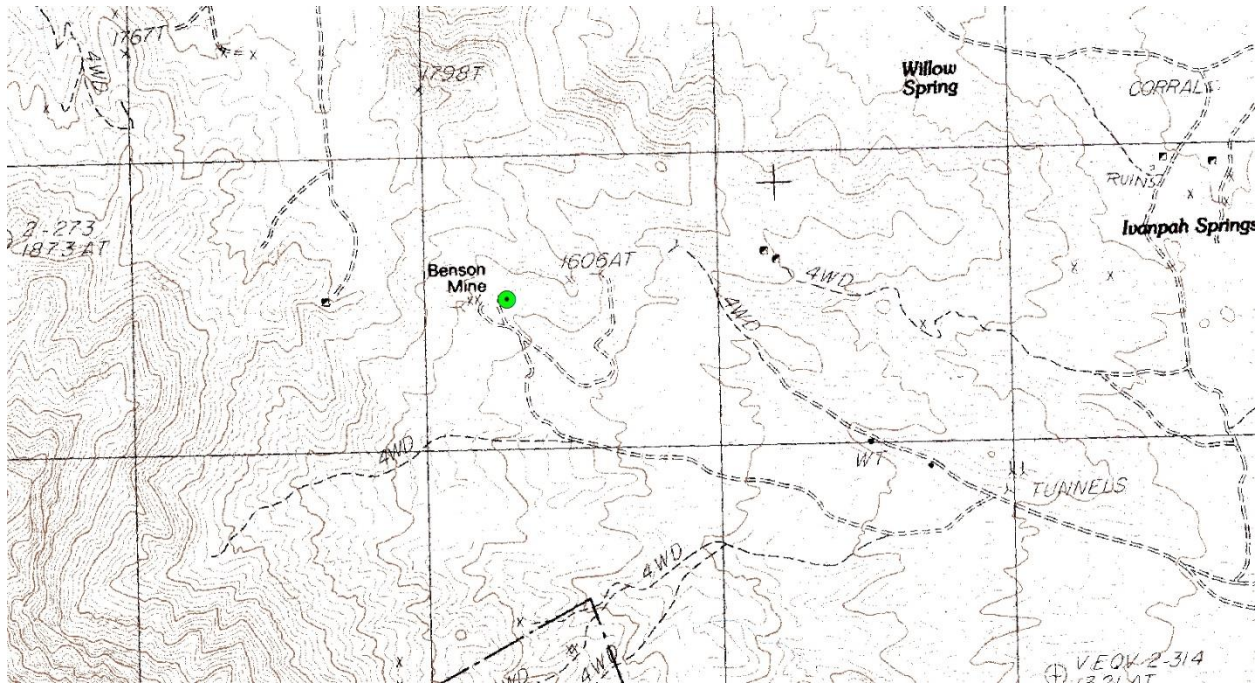


Figure 3. Topographic map of the Benson Mine. USGS Ivanpah quadrangle, 1:24K.

This mine is hosted by Precambrian gneiss and metamorphic rocks, and is east of the Clark Mountain Fault. (Hewett, 1957, Plate 1).

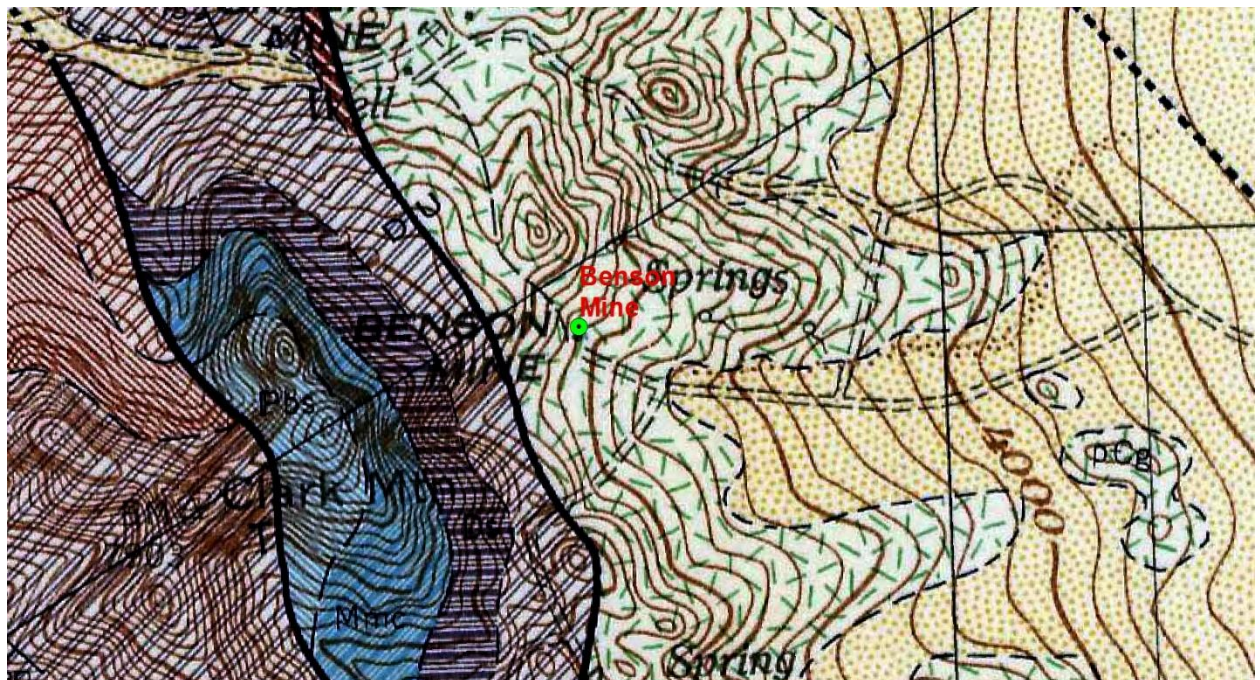


Figure 4. Geologic map of the Benson mine and surrounding area. From Hewett, 1957, Plate 1.

When visited in 1926, work had been abandoned for some years and all equipment had been removed. A vertical shaft estimated to be 200 feet deep connects with about 500 feet of horizontal

workings. To judge from material on the dump and surface pits, these workings explore a lens of copper-bearing pyrite that lies along a schistose zone in the granite gneiss. Several other prospects in the neighborhood explore similar deposits. (From Hewett, 1957, p.136).

In 1961, Dobbs reported that the workings consist of a vertical shaft approximately 200 feet deep, a drift about 100 feet long, and several other small prospects consisting of pits and cuts. These workings explore mineralized zones along the intersection of the Benson fault and Ivanpah Springs fault (note, this area was not mapped in Dobbs, 1961, Plate1). Mineralization of specimens gathered from the dumps consists of pyrite, chalcopyrite, azurite, malachite, and limonite. Hewett (1956) stated that the workings explored and mined copper-bearing lenses in the shear zone, and assumed that the mine was worked only for copper. However, assay analysis of a grab sample taken by Dobbs from the main dump revealed gold values of \$10.75 per ton (1961 value, \$32.00 per ton). Therefore it may be assumed that the mine was worked for gold as well as copper. There are no production records for this mine. It was idle in 1961 (From Dobbs, 1961, p.84-85).